

Special Report

Exposure Draft: Reassessment of Municipal Ratings Framework

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Executive Summary

This exposure draft discusses proposed changes to Fitch Ratings' municipal ratings framework following a four-month review of the sector. The review compared Fitch-rated U.S. municipal securities to debt Fitch rates in other sectors, including corporates and sovereigns. Concurrent with this internal review, Fitch held a series of roundtable discussions with numerous issuers, investors, and intermediaries regarding Fitch's municipal ratings framework.

Major findings and conclusions of the review:

- Fitch proposes a recalibration of its municipal ratings so they denote a comparable level of credit risk as its international rating scale for corporate, sovereign, and other entities. This is in contrast to assigning and maintaining two ratings for municipal securities on a dual scale system.
- Recalibration of the municipal ratings would result in upward revisions on most bonds backed by general obligations (GOs), broad-based special taxes such as sales, utility, and gas taxes levied municipality- or state-wide, or appropriations (hereafter referred to collectively as tax-supported), and water/sewer revenue bonds of one to two notches.
 - Ratings will typically be revised up by two notches if the GO or senior revenue bonds of the issuer are rated between 'BBB' and 'A', inclusive.
 - Ratings will typically be revised up by one notch if the existing associated GO or senior revenue bonds are rated between 'A+' and 'AA', inclusive.
 - Revisions on securities currently rated 'AA+' and 'BBB-' or lower will be reviewed on a case-by-case basis.
- Fitch presents preliminary adjustments on 58 state, local government, and water/sewer bond ratings that Fitch believes are representative of the expected adjustments.
- After the recalibration, the percentage of state and local GO credits rated in the 'AA' and 'AAA' categories is expected to increase to approximately 86% from 58%.
- While a review of historical default rates alone might justify a rating revision of slightly more than one to two notches, Fitch is concerned that current economic conditions and other long-term challenges may erode some of the credit protections currently observed in tax-supported and water/sewer revenue credits, which tempers the extent of the rating uplift. Fitch will continue to examine and make necessary adjustments in the framework for tax-supported and water/sewer revenue ratings once the impact of the current downturn is clear.
- Fitch will subsequently review other U.S. public finance sectors such as tax-exempt housing, public power, higher education, health care, and solid waste, as well as narrow tax-backed obligations (i.e. special assessments, tax-increment financings,

Fitch Ratings is releasing this report to solicit market feedback and commentary (see *Feedback Sought*, page 14). Comments may be sent to muniframework@fitchratings.com, through Aug. 29. Comments may be published as part of the public consultation process.

Related Research

- *Fitch Ratings Global Corporate Finance 2007 Transition and Default Study, April 30, 2008*
- *Municipal Default Risk, Sept. 15, 1999*
- *Municipal Default Risk Revisited, June 23, 2003*
- *Local Government General Obligation Rating Guidelines, March 22, 2007*
- *U.S. State General Obligation Bond Criteria, April 25, 2008*
- *Sales Tax Revenue Bond Rating Guidelines, March 28, 2007*
- *Municipal Lease Rating Guidelines, March 22, 2007*
- *Water and Sewer Revenue Bond Rating Guidelines, April 16, 2007*

tax allocation bonds, municipal utility districts, and hotel tax bonds) and making any revisions, as appropriate.

In most cases, recalibrations will be done systematically; however, in certain circumstances, a review of the credit would be necessary before the rating is revised. These include: issuers without current comprehensive annual financial reports (CAFRs) and local tax-supported or water/sewer revenue bond issuers that fail to meet certain basic tests, as discussed on page 13. This exposure draft is submitted for public comment through Aug. 29. Comments may be e-mailed to muniframework@fitchratings.com.

Rationale

In deciding to recalibrate its tax-supported and water/sewer bond ratings, Fitch considered the following:

- **Favorable Credit Characteristics:** The tax and rate setting powers granted to state and local governments and authorities, their importance as essential service providers, and the generally low vulnerability of these entities to competition and event risk represent significant advantages of municipal issuers vis-à-vis most corporate issuers.
- **Low Overall Default Experience:** While default experience in municipal securities has been extremely low, recent experience has also shown little difference in the Fitch-rated historical default experience among 'AAA' and 'AA' rated municipal, corporate, and sovereign entities. The greater disparity in default rates at 'A' (0.65% five-year cumulative default rate for corporates versus zero for municipals) and 'BBB' (3.11% five-year cumulative default rate for corporates versus 0.66% for municipals) provides additional support to Fitch's decision to revise the lower-rated tax-supported and water sewer revenue bonds up by two notches, while revising the higher-rated credits up by only one notch. While there have been no defaults of Fitch-rated tax-supported or water/sewer revenue bonds, Fitch is aware of defaults on such bonds that have been rated by other rating agencies. There have also been numerous "near misses" where issuers may have avoided default due to extraordinary support from other entities.
- **Existing Rating Distribution:** The favorable credit characteristics of U.S. state and municipal issuers are already significantly reflected in their existing ratings. U.S. public finance is among the highest rated sectors in Fitch's rating universe, with 47.1% of state and local general obligation credits currently rated in the 'AA' category and 10.9% rated 'AAA' vs. only 9.0% and 1.1% for all U.S. corporate finance ratings, respectively.
- **Headwinds for Public Finance:** A variety of challenges, some unprecedented, face municipal issuers going forward that temper expectations for generally strong future credit performance. These include severe housing price declines and record-high fuel costs; simultaneous weaknesses in property, sales, and income tax revenues; expenditure pressures; increased funding requirements for pensions and other post-employment benefits (OPEB); higher expected debt burdens and increased infrastructure needs; dislocations in the credit markets that may affect market access; lower credit quality and constrained capacity of credit enhancement and liquidity providers.

One Scale vs. Two Scales?

Fitch proposes recalibrating its municipal ratings so they are consistent with other Fitch ratings on its international scale as opposed to assigning and maintaining dual ratings on separate scales. This was the option preferred by the majority of the participants at Fitch's roundtable discussions. While municipal investors generally expressed a desire for maintaining ratings granularity, most participants asserted that maintaining two ratings

would be confusing, and inevitably, market participants would want to know which is the “real” rating. Also, after considering the expected adjustments to align municipal ratings with the international scale, Fitch determined that granularity will remain, making a dual scale approach unnecessary.

Expected Impact of Rating Recalibration

The recalibration process will result in broad-based upward ratings adjustments, subject to certain constraints. Upward revisions will typically be two notches for tax-supported and water/sewer revenue bonds whose issuers’ GOs or senior revenue bonds are currently rated between ‘BBB’ and ‘A’, inclusive, and one notch where the issuers’ GOs or senior revenue bonds are currently rated between ‘A+’ and ‘AA’, inclusive. (Fitch notes this will eliminate the distinction currently made between ‘A’ and ‘A+’ rated entities). The level of revision to appropriation-backed debt, special tax bonds, and subordinate lien revenue bond ratings that may rated lower than the GO will be governed by that of the GO or senior revenue bonds. Issues that have been listed on Rating Watch will be recalibrated and remain on Rating Watch, and ratings that have been assigned Rating Outlooks will maintain the same Rating Outlook, with certain exceptions such as: for bonds rated ‘A’ with a Positive Rating Outlook and ‘A+’ with a Negative Rating Outlook, the ratings will be recalibrated to ‘AA–’ and the Rating Outlook revised to Stable, so their relative ranking is not reversed; for bonds rated ‘A’ Rating Watch Positive and ‘A+’ Rating Watch Negative, the ratings will be recalibrated to ‘AA–’ and the Rating Watch reviewed; and for bonds currently rated ‘AA’ with a Positive Rating Outlook, the ratings will be revised to ‘AA+’ with either a Stable or Positive Rating Outlook, as determined by a review.

Credits outside the above rating levels will be reviewed prior to recalibration. Revisions from ‘AA+’ to ‘AAA’ will be made selectively, because of the extremely remote credit risk associated with the ‘AAA’ rating. Tax-supported and water/sewer revenue bonds of issuers whose GOs or senior revenue bonds are rated ‘BBB–’ and lower will be reviewed before they are revised, as bonds rated at these lower rating levels generally possess credit characteristics that raise concerns. Certain other conditions will necessitate reviews be performed prior to recalibration, as detailed on page 13.

Average Ratings and Ranges by Class

Sector	Current Average Rating	Expected Average Rating	Expected Range for Most Ratings
State GOs	AA	AA+	AA– to AAA
Local Government GOs	AA–	AA	A+ to AAA
Water/Sewer	A+	AA–	A+ to AAA

The table above shows the current average rating, expected average rating, and expected rating range of the affected sectors. The current and expected ratings on 58 issuers (assuming no credit migration before the changes are implemented) are presented in Appendix I on page 15 to provide a representative sample of the rating changes Fitch anticipates in its recalibration.

As shown in the table on page 4, a large number of adjustments of ratings to the ‘AA’ category from the ‘A’ category would result from the recalibration, and some ratings already ‘AA+’ would be adjusted to ‘AAA’, following a review. As a result, the percentage of Fitch state and local government GO ratings that are rated in the ‘AA’ category is expected to increase from 47% to approximately 70% and ‘AAA’ from 11% to approximately 16%. A comparison with the U.S. corporate finance rating distribution is also included.

Current vs. Expected GO Rating Distribution

(%)

	AAA	AA	A	BBB	BB	B and Below
Current GO Ratings	10.9	47.1	35.7	6.1	0.2	0.0
Expected GO Ratings	16.3	70.2	12.1	1.4	0.0	0.0
U.S. Corporate Finance Ratings	1.1	9.0	28.7	35.5	12.9	12.7

Note: Assumes for illustrative purposes only that 50% of the 'AA+' ratings are revised to 'AAA'.

Sector Recalibrations

Recalibrations are a normal part of the rating process. Fitch first reviewed its municipal ratings in 2000 following a default study Fitch performed the prior year (*see Fitch research on "Municipal Default Risk," dated Sept. 15, 1999, available on Fitch's web site at www.fitchratings.com*), which indicated extremely low default rates for certain types of municipal obligations; this review resulted in an upgrade of about 25% of Fitch's general obligation ratings and one-half of its water/sewer revenue bond ratings. Since then, there has been increased interest on the part of all rating users for ratings comparability across all asset segments, as traditional barriers between asset classes have been eroded by market developments. A global review and recalibration of bank support ratings was performed in 2002, following a review of historical bank failures, and a revision of Fitch's market value and corporate collateralized debt obligation criteria was completed earlier this year to promote greater ratings stability. The methodologies Fitch uses for rating the monoline financial guarantors are also being reviewed to see if there are aspects that can better assess risk or increase rating stability, and may also incorporate any changes made to the U.S. municipal framework.

Roundtable Meetings

In performing the current municipal review, Fitch held four roundtable meetings with 44 issuers, investors, and intermediaries active in public finance beginning in March. Virtually all participants felt that a number of developments have occurred in the municipal market that make this most recent recalibration both necessary and timely. These developments include: the globalization of the municipal market beyond traditional tax-exempt investors; the enormous demand by tax-exempt money market funds for qualified instruments under the SEC's 2a-7 rule (the SEC has proposed, but not yet implemented, changes to rule 2a-7 that would eliminate the requirements for NRSRO ratings); and the diminished credit quality of most monoline bond insurers and constrained capacity among remaining credit enhancement and liquidity providers.

What Do Ratings Address?

Credit risk, as measured by Fitch's ratings on municipal debt obligations, is comprised of both default risk and loss given default. As a practical matter, recovery is generally given little consideration in the assignment of ratings at investment-grade levels, where default expectations are low and recovery may be more difficult to predict on specific issues. Recovery may become a greater factor at below-investment-grade levels. However, Fitch notes that recovery data on municipal defaults is limited for rated securities, and therefore may not provide an accurate guide as to what will occur in the future. Fitch will continue to study this issue.

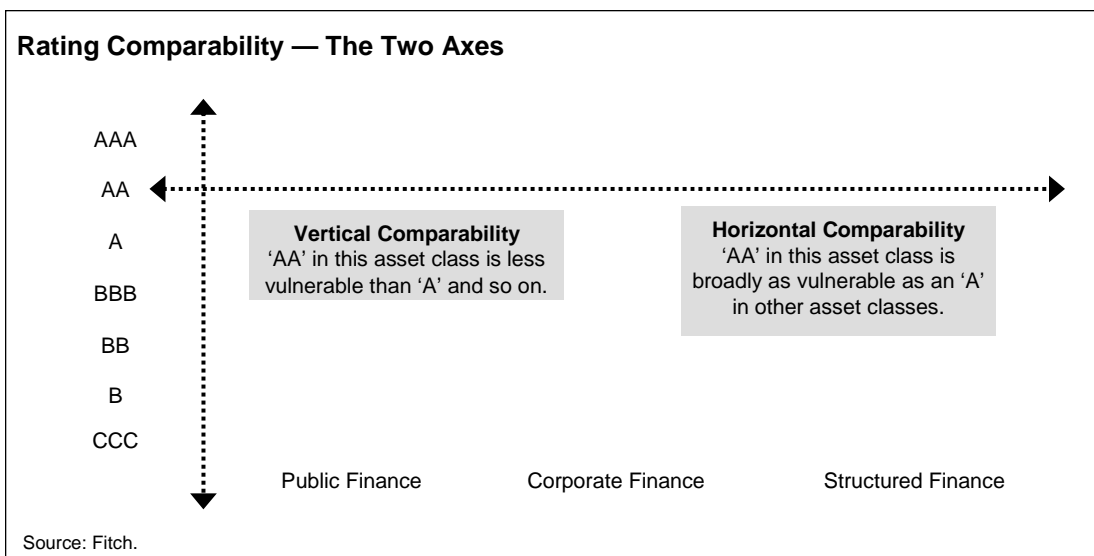
At the roundtable discussions, most issuers and investors also voiced the opinion that municipal ratings, particularly at investment-grade levels, should focus primarily on default risk.

Ratings Recalibration: Achieving Comparability

Comparing Ratings Across Sectors at Fitch

Fitch's ratings do not aim to predict specific percentage frequencies (cardinality) of default. Instead, they aim to present a relative, ordinal scale of creditworthiness. This approach maintains greater rating stability — ratings do not move dramatically down when the economic cycle is depressed or dramatically up when the cycle is benign — but also makes comparability a more complex issue.

For example, comparability for a given 'AA' rating operates along two broad axes. As a goal, ratings should be comparable on a vertical axis, relative to other issuers within its broad asset segment (corporate finance, structured finance, and public finance), such that the 'AA' rating implies that it is more vulnerable than 'AAA' rated credits in its segment, and less vulnerable than 'A' rated credits. Similarly, ratings should be comparable on a horizontal axis, relative to other obligations of the same rating category, such that an 'AA' rated municipal obligation should have a broadly comparable credit quality to 'AA' credits across corporate and structured finance asset segments as well.



Harmonizing ratings across different asset classes is a challenging exercise. Ratings could be mapped by simply looking to historical default rates, but that would assume that the future will be an exact repeat of the past. Alternatively, one could examine a range of variables thought to be relevant to gauging, prospectively, the ability and willingness of an issuer to service its obligations in a timely fashion. However, unless the environment has changed radically, historical default rates provide at least some guidance as to the general level of defaults likely to be experienced in the future. Consequently, Fitch believes that both a careful review of the historical record, and a prospective view based on sound credit analysis are necessary to harmonize ratings across asset classes.

Harmonizing Corporate and Municipal Ratings — Analytical Considerations

Credit analysis starts with the identification of key determinants of financial health, as well as vulnerabilities, or risk factors. Following the identification of these qualitative considerations, quantitative credit metrics can sometimes be used to help gauge strengths or weaknesses in these areas. Some areas of analysis are very difficult to

quantify; whether good quantitative metrics are available or not, a large degree of discretion must be used when evaluating the importance of any specific factor.

While there are important similarities between municipal issuers and corporate issuers, there are significant differences, as well. As such, it is very difficult to formulaically link ratings between the two. Instead, both qualitative and quantitative considerations likely to drive future performance are considered.

Some of the key risk factors common to both municipal and corporate issuers include:

- Economic climate.
- Demographic shifts.
- Industry rationalization/consolidation.
- Labor pressures
- Changing management/leadership.
- Increasing leverage.
- Increasing pension and medical benefits liability.
- Unanticipated expenses.
- Revenue/tax source concentration.
- Inappropriate derivatives usage.
- Litigation.
- Liquidity crunch.
- Off-balance sheet exposures.
- Natural disasters.

The extent to which both types of issuers share similar risks is not equal, but there is some degree of commonality between the two. However, some risks are more particular to either municipal or corporate issuers. Examples of risks relevant to municipal issuers include:

- Less robust regulatory framework.
- Less timely financial disclosure and price discovery.
- Less efficient and predictable decision-making process, which can lead to impasses.
- Ballot initiatives that restrict revenue-raising or expenditure flexibility.
- Lack of incentive to maximize operating margins or reserves.

Some of the risks unique to corporate issuers include:

- Mergers and acquisitions (such as large debt-financed acquisitions, LBOs, etc.).
- Other shareholder enhancing actions (i.e. share buy-backs).
- Competition. (Some public finance entities not addressed in this report, such as public health care facilities, can be subject to competitive pressures, as well.)

Of the above risks, those specific to corporate issuers tend to be more worrisome than those unique to municipal issuers. In particular, the desire on the part of corporate management to satisfy shareholder interests (which are shared by senior management) has played a large role in corporate ratings downgrades over the years. The need to keep share prices growing (or from slipping) often brings about actions that benefit shareholders at the

expense of creditors. Such actions include share buybacks, debt-financed acquisitions, and LBOs, which could leave the company in question saddled with additional debt.

However, municipal entities have their own constituents, and lawmakers often feel pressure to provide more or the same services without raising taxes, which may pressure finances. Practical and often legal limits on reducing services, mandated spending, collective bargaining, and civil service rules can severely limit budget-cutting flexibility. In addition, the ability to raise taxes is often politically limited and, in some cases, tax reductions or growth limits are legally imposed through voter initiatives or legislative action. While historically these pressures have been nowhere near as damaging as those highlighted for corporates, they nonetheless have tangible credit impacts.

Municipal entities also have historically had some benefits generally not shared by most corporate issuers including:

- Governments are ongoing entities that provide essential services.
- Tax and rate raising authority.
- Legal security (unlimited tax general obligation, first lien on pledged tax revenue).
- Power to enforce revenue collections.
- Possibility of external support.

Some corporate issuers do share some of the above characteristics, notably regulated utilities, which are essential service providers. Other corporates may also share some of the attributes of municipal entities, such as banks, which may receive external support. However, the majority of corporate issuers do not share these characteristics.

In attempting to harmonize ratings across asset classes, Fitch also considered sovereigns, which exhibit some of the same characteristics of state GO issuers. Some of the characteristics shared by these two types of issuers include: self-governing political entities, operating in a defined geographical space; generally large, economically diverse areas; ability to levy taxes and raise rates; exist to serve public good, provide essential services, without significant competitive risks; devoid of many of the risks, event and otherwise, faced by corporations; sensitive to many of the same macroeconomic, expense control, political, and demographic risks. Some of the differences include: essential services do not totally overlap; sovereign reach extends beyond those of states; and states are subject to federal mandates.

Historical Perspective — Comparing Default Experience for Public Finance vs. Other Sectors

While Fitch does not rate to specific cardinal default rates, default studies are clearly a useful frame of reference when aligning ratings, if proper consideration is also given to factors that influenced past performance and, more importantly, that are likely to influence future performance. For this recent recalibration effort, Fitch compared the default experience of Fitch-rated public finance entities to other Fitch-rated sectors. This exercise confirmed findings from Fitch's previous studies, namely that whether over one-year or multiyear periods, Fitch-rated municipal issuers have rarely defaulted.

Fitch has conducted two studies on public finance default rates, starting the process nearly a decade ago to document default rates in this sector of the debt markets. This effort had focused primarily on the par value of municipal bond defaults relative to the total value of bonds brought to market, whether rated by Fitch or any other agency or unrated. To supplement these market studies, and more importantly, to offer a specific view of historical default rates on Fitch-rated municipal issuers, Fitch's prior research was recently

reconstituted to match the methodology used to measure default rates on Fitch-rated corporate issuers. The methodology used to calculate default rates is based on a cohort or static pool approach, whereby the performance of a pool of ratings outstanding at the beginning of a given year is examined over one- and multiple-year horizons with any defaults recorded accordingly. In addition, to arrive at average measures of default, the performance of each cohort is weighted by its relative size (or the number of ratings outstanding relative to the full data set). This is done to give greater weight to larger sample pools. This approach also tends to emphasize more recent results.

The five-year cumulative default rate on Fitch-rated investment-grade municipal issuers has averaged just 0.10% since the early 1990s, composed of six municipal defaults (five in the health care sector and one in higher education); there have been no defaults on Fitch-rated tax-supported or water/sewer revenue bonds. Fitch is aware of defaults on such bonds that have been rated by other rating agencies. Furthermore, there have also been numerous near misses (see Appendix II) where issuers may have avoided default due to extraordinary support from other entities.

The cumulative five-year investment-grade default rate for corporates in contrast was 1.2%. However, as shown in the tables below, the more meaningful variability in default rates across the two broad market sectors occurred at the 'A' and 'BBB' levels rather than across the 'AAA' and 'AA' rating grades, providing additional support for Fitch's proposal to apply more substantial ratings uplifts for municipal issuers currently in the 'A' and 'BBB' category.

Fitch U.S. Public Finance Average Cumulative Default Rates: 1990–2007

(%)

	One-Year	Two-Year	Three-Year	Four-Year	Five-Year
AAA	0.00	0.00	0.00	0.00	0.00
AA	0.00	0.00	0.00	0.00	0.00
A	0.00	0.00	0.00	0.00	0.00
BBB	0.03	0.08	0.18	0.38	0.66
Investment Grade	0.00	0.01	0.03	0.06	0.10
High Yield	1.39	2.38	3.75	5.05	5.84
All Public Finance	0.03	0.05	0.09	0.14	0.19

Fitch Global Corporate Finance Average Cumulative Default Rates: 1990–2007

(%)

	One-Year	Two-Year	Three-Year	Four-Year	Five-Year
AAA	0.00	0.00	0.00	0.00	0.00
AA	0.00	0.00	0.00	0.03	0.06
A	0.03	0.15	0.30	0.44	0.65
BBB	0.24	0.78	1.48	2.24	3.11
Investment Grade	0.09	0.32	0.60	0.88	1.21
High Yield	2.70	5.26	7.64	9.90	12.26
All Public Finance	0.58	1.19	1.79	2.35	2.93

Across the top two rating categories ('AAA' and 'AA'), default rates on the corporate side have also been low, generally in line with those experienced in the municipal sector. Of note, the 'AAA' corporate rating category is very small, and thus, the sample less than robust. In general, the 'AA' rating category provides a more robust sample, and has also enjoyed a historically very low default rate. Since the early 1990s, Fitch has recorded no 'AAA' corporate defaults to date, although Fitch is aware of corporate bonds rated 'AAA' by

other rating agencies that have defaulted. Also, it is important to note that some of the formerly Fitch 'AAA' rated financial guarantors have suffered severe credit deterioration due to exposure to certain CDOs and other structured transactions and have been downgraded to below investment-grade. There have been just two 'AA' defaults — Dow Corning in 1995, defaulting four years after last holding a 'AA' rating, and Southern California Edison, defaulting 10 years after being last rated 'AA' by Fitch. The lone default by Dow Corning fully contributed to the 0.06% 'AA' five year cumulative corporate default rate shown below. Among sovereign credits, there have been no defaults at the 'A' category and above.

Putting Historical Default Data in Perspective

While Fitch believes that historical default experience can provide some of the context for Fitch's rating recalibration effort, default rates must nonetheless always be evaluated in a critical, forward-looking manner, recognizing limitations in the data itself, as well as avoiding overreliance on past performance as a predictor of future performance. It is also important to recognize that default sometimes occurs due to events difficult to predict through traditional credit analysis (i.e. as a result of management fraud or following a poorly conceived leveraged buy-out). These are extraneous event risks that affect corporate issuers far more than public finance entities and therefore, can also lead to divergent default rates.

Beyond the data limitations, it would be faulty to conclude that the lack of defaults over some historical time horizon implies that a rated instrument carries zero risk. For example, since the early 1990s, default rates on Fitch-rated investment-grade commercial mortgage backed securities (CMBS) have also been very low due to historically low interest rates and rising commercial real estate values. However, considering the current dislocation in the credit markets and the weakening U.S. economy, Fitch expects the incidence of defaults in the CMBS sector to increase. Fitch's current CMBS ratings, as investors would expect, reflect a forward-looking view of default risk rather than benign historical performance. Developments in spreads for CMBS are consistent with this view, having widened in 2008.

Fitch Global CMBS Average Cumulative Default Rates: 1991–2007

(%)

	One-Year	Two-Year	Three-Year	Four-Year	Five-Year
AAA	0.00	0.00	0.00	0.00	0.00
AA	0.00	0.00	0.00	0.00	0.00
A	0.00	0.00	0.00	0.00	0.00
BBB	0.00	0.00	0.02	0.06	0.11
Investment Grade	0.00	0.00	0.01	0.02	0.03
High Yield	1.41	3.22	5.28	7.49	9.67
All Public Finance	0.38	0.90	1.48	2.09	2.67

Taking a Forward-Looking Credit View

Following are some of the factors and challenges currently facing the tax-supported and water/sewer revenue sectors that Fitch has considered in conjunction with its review of the historical data.

Governments Will Continue to Exhibit Strong Credit Quality

Fitch expects that state and local governments will continue to possess considerable credit strengths. In general, they are highly stable entities that are expected to operate

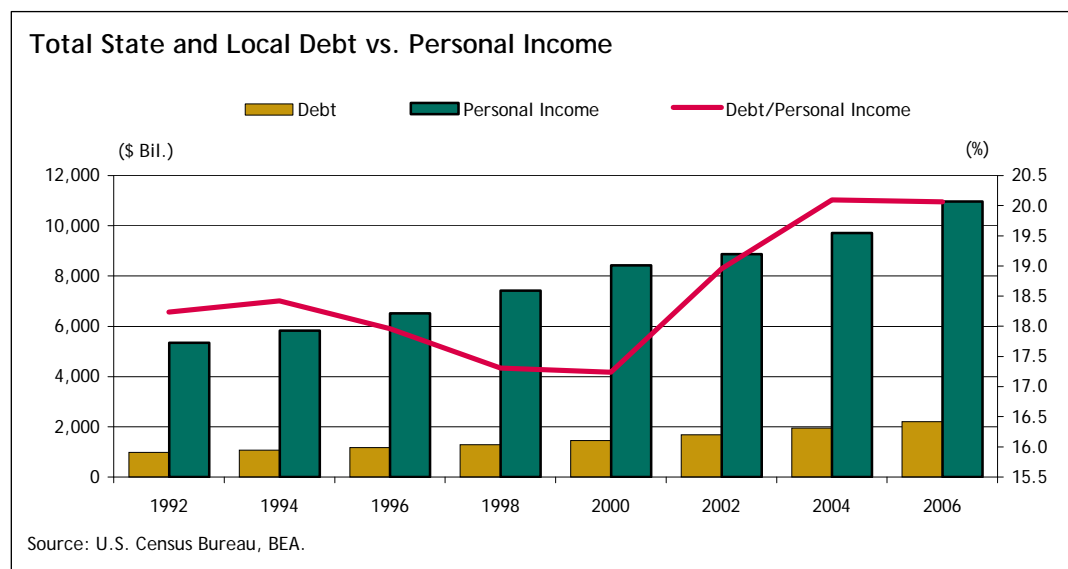
indefinitely. They derive their revenues from broad-based sources, and most have at least some flexibility to adjust revenues (through tax, rate, and fee increases) and expenditures.

Local and State Governments Will Feel the Impact of the Bursting Housing Bubble

The widespread housing downturn, particularly severe in certain regions, is having significant ramifications for many states and municipalities. Fitch believes that the simultaneous slump in property, sales, and income tax revenue may be unusually severe.

Property taxes are most commonly the largest source of local government funding. After several years in which governments became dependent on large annual assessed value gains resulting from increased home prices, declining home values and sales are leading to slower growth or in some cases declines in this important revenue source. While property assessment and taxation practices in many states will provide at least some buffer from falling prices, Fitch believes this buffer could erode quickly, and rate-raising ability in some jurisdictions may be legally or politically constrained.

The rapid growth in home prices also created an increased perception of wealth and prompted the proliferation of home-equity loans that allowed homeowners to increase spending. The reversal of this trend has resulted in a sometimes sizable reduction in sales tax revenues, a major revenue source in some states as well as municipalities. Higher fuel costs and general economic uncertainty are compounding sales tax declines. Personal income tax collections will likely be affected by these conditions, along with the possibility of significant capital gains reductions given the losses and volatility in the financial markets.

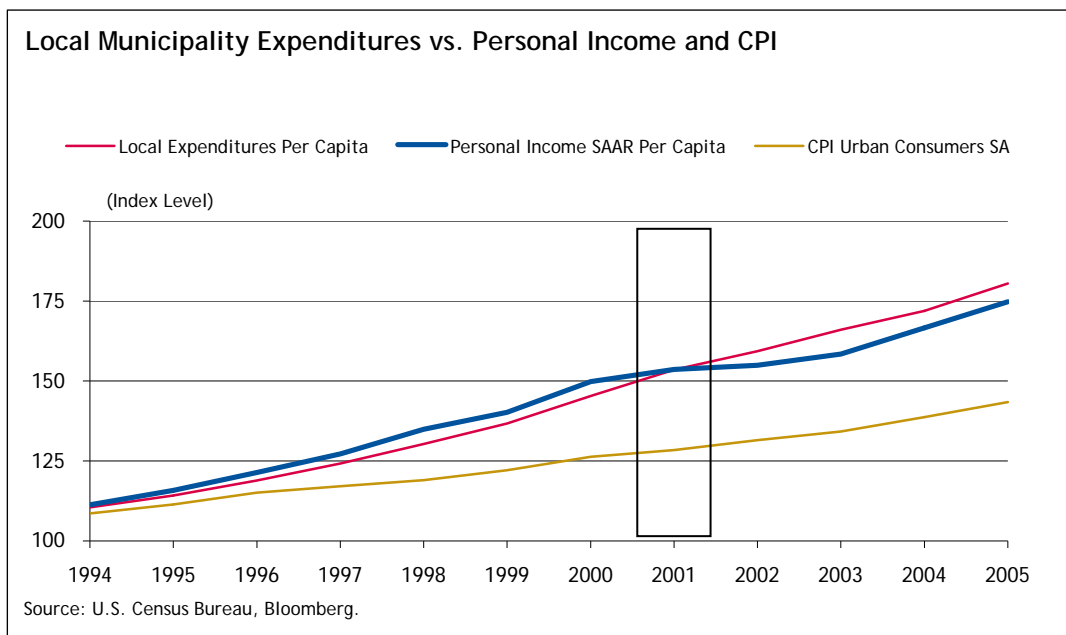


Growth in Debt and Spending Exceeds Growth in Income

State and local debt in the aggregate has been increasing at a faster pace than GDP, personal income, and population. This trend is expected to continue given large scale expansion and replacement needs, particularly for transportation and other infrastructure, and general government facilities.

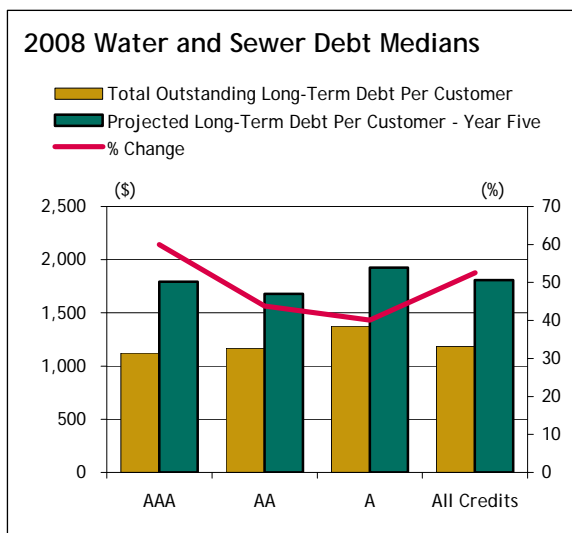
Also, as the chart at the top of page 11 shows, expenditures at the local level have grown faster than personal income (which is highly correlated to GDP). Notably, the chart does not reflect the current significant slowdown in the economy, which may

result in a growing gap between personal income and municipal expenditures, given the expected slowdown in the former and the continued growth in the latter. (The chart on page 10 highlights the divergence between expenditures and personal income that came about during the 2001–2002 slowdown.)



Local spending pressures are largely due to growing public safety and employee benefits (as discussed in the section on page 12). Education is the largest state budget expense, and property tax relief pressures have led to measures to shift more of the local school funding burden to the state level. Medicaid represents the next largest cost to state government. While the recent expansion of federally funded Medicare coverage to included prescription drugs has reduced the rate of growth of Medicaid somewhat, longer-term growth rates are expected to return along with continued pressures to broaden coverage to address the uninsured population.

Water and sewer credits face sizable near- to medium-term capital needs for rehabilitation of aging infrastructure, heightened regulatory requirements, and ongoing growth and supply pressures. In an effort to balance ongoing resources with the cost of these outlays and at the same time mitigate the immediate impact to ratepayers, water and sewer utilities increasingly have been projecting a surge in additional near-term borrowing activity. For Fitch's most recent round of medians, these utilities are projecting leverage rates to increase 52% over the next five years. Despite currently strong balance sheets, moderate leverage, and sound operating performance, given the



current economic environment and the overall pressure to shore up spending in other governmental areas, there is a potential concern that officials may be reluctant to pursue ongoing rate hikes at a level that would preserve the financial margins of utilities over the immediate horizon.

Pension and OPEB Funding Create Additional Pressure

Affecting both state and local issuers has been the increase in pension expenses to replace stock market losses (and higher benefits granted) earlier this decade. Recent financial market volatility may again lead to lower returns and eventually funding increases. Moreover, a recent accounting requirement to recognize OPEB costs has resulted in the disclosure of the massive long-term liabilities in many governments. Since the requirement is so new, municipal entities for the most part have not made anywhere near the same inroads as have many corporations in attempting to restrain or pre-fund OPEB costs. Coupled with an aging work force, combined OPEB and pension funding requirements will result in significant pressure on municipal finances.

Susceptibility to Refinancing Risk

While many short-term funding structures unique to the sector have operated well in the past, recent events in the municipal market, particularly with regards to auction-rate securities (ARS) and variable-rate demand notes (VRDNs), have shown that refinancing cannot be taken for granted. Also, constrained financing capacity from financial institutions and reduced enhancement capacity from financial guarantors may make market access more problematic or increase capital costs for some issuers.

Municipal Credit Default Swaps

A separate issue is the emergence of credit default swaps (CDS) trading on public finance entities. While CDS brings certain advantages, the advent of CDS trading on municipals is not unambiguously positive. Specifically, CDS are the vehicle of choice for short-term traders that take large positions and make changes very quickly when investor sentiment changes. Consequently, to the extent that CDS are trading on a specific entity, and that entity is perceived to be having difficulties, then increased CDS spread volatility could spill over into the primary market, possibly affecting the entity's access to (or cost of) funding.

Process for Revising the Ratings

Fitch has more than 2,000 parity ratings on tax-supported and water/sewer revenue obligations. To revise these ratings, Fitch will use the following process.

Ratings Suitable for Systematic Recalibration

Most of Fitch's ratings in the tax-supported and water/sewer revenue sectors will be systematically recalibrated. A rating will be eligible for systematic recalibration if the following conditions are met:

- The issuers' GOs or senior revenue bonds are currently rated between 'BBB' and 'AA'.
- Fitch is in receipt of the issuer's comprehensive annual financial report (CAFR) for the 2007 fiscal year.
- For local tax-supported issuers, either Fitch has reviewed the 2007 CAFR in its last rating review or all of the following are true:
 - The CAFR has an unqualified auditor's opinion.
 - The unreserved general fund balance is greater than 2% of spending.

- Total general fund balance in fiscal 2007 did not decrease by more than 50%.
- For special tax bonds, debt service coverage is above the additional bonds test (ABT).
- For water/sewer revenue bonds, the CAFR has an unqualified auditor's opinion, debt service coverage from all classes of debt is at least 1.0x, and current unrestricted cash is at least 30 days of operations in the most recent audited fiscal year.

If the above are true, ratings would be systematically revised up two notches if they are associated with GOs or senior revenue bonds rated between 'BBB' and 'A', inclusive and one notch if the GOs or senior revenue bonds are rated between 'A+' and 'AA', inclusive. The level of revision to appropriation-backed debt, special tax bonds, and subordinate lien revenue bond ratings that may be rated lower than the GO will be governed by that of the GO or senior revenue bonds. Ratings listed on Rating Watch would be recalibrated as indicated above, and the Rating Watch would remain in effect; Rating Outlooks would remain the same after the calibration (*for exceptions to this, see details on page 3*).

Tax-supported and water/sewer revenue ratings not meeting all the above conditions would necessitate a review before they are revised.

New Issue Ratings

New issue tax-supported and water/sewer revenue ratings would be assigned based on the revised ratings framework if and when it is adopted. Fitch-rated parity and related debt of these issuers that have not already been recalibrated would be reviewed and updated at that time as well.

Future Studies

While a review of historical default rates alone might justify a rating revision of slightly more than one to two notches, Fitch is concerned that current economic conditions and other long-term challenges may erode some of the credit protections currently observed in tax-supported and water/sewer revenue credits, which tempers the extent of the rating uplift. Fitch will continue to examine and make any adjustments if necessary in the framework for tax-supported and water/sewer revenue ratings once the impact of the current downturn is clear. Fitch will also continue to study the potential for recoveries in its rating analysis.

Fitch also intends to perform similar reviews to this one for other municipal sectors such as public power, higher education, airports, tax-exempt housing, health care, and solid waste, comparing ratings in those sectors to Fitch's ratings in analogous corporate sectors, where appropriate. Fitch also intends to perform a sector review of its ratings on bonds backed by narrow-based tax streams such as tax-increment financings, tax allocation bonds, special assessments, municipal utility districts, and hotel-tax bonds. Fitch will make any rating revisions in the above sectors, as appropriate.

Feedback Sought

Users are invited to comment on:

- Fitch's proposal to recalibrate municipal ratings to its international rating scale, as opposed to the alternative of assigning and maintaining ratings on dual scales.
- Fitch's proposal on the procedure for implementing the rating recalibration.
- Fitch's plan to consider recalibration of other municipal sectors at a later date.

Feedback should be directed to muniframework@fitchratings.com through Aug. 29.

Appendix I

The table below, which is continued on page 16, lists selected Fitch-rated state and local entities to illustrate how recalibration may affect municipal issuers.

List of Selected Ratings and Expected Revisions

Issuer	Security Type	Current Rating	Rating Outlook/ Watch	Expected Rating ^a	Expected Rating Outlook or Watch ^a	Needs Review	Comments
States							
Delaware	GO	AAA	Stable Outlook	AAA	Stable Outlook	No	
Georgia	GO	AAA	Stable Outlook	AAA	Stable Outlook	No	
Maryland	GO	AAA	Stable Outlook	AAA	Stable Outlook	No	
Minnesota	GO	AAA	Stable Outlook	AAA	Stable Outlook	No	
Missouri	GO	AAA	Stable Outlook	AAA	Stable Outlook	No	
North Carolina	GO	AAA	Stable Outlook	AAA	Stable Outlook	No	
South Carolina	GO	AAA	Stable Outlook	AAA	Stable Outlook	No	
Utah	GO	AAA	Stable Outlook	AAA	Stable Outlook	No	
Virginia	GO	AAA	Stable Outlook	AAA	Stable Outlook	No	
Florida	GO	AA+	Stable Outlook	AA+ or AAA	Stable Outlook	Yes	
Iowa	GO	AA+	Stable Outlook	AA+ or AAA	Stable Outlook	Yes	
Nevada	GO	AA+	Negative Outlook	AA+ or AAA	TBD	Yes	
Ohio	GO	AA+	Stable Outlook	AA+ or AAA	Stable Outlook	Yes	
Tennessee	GO	AA+	Stable Outlook	AA+ or AAA	Stable Outlook	Yes	
Texas	GO	AA+	Stable Outlook	AA+ or AAA	Stable Outlook	Yes	
Vermont	GO	AA+	Stable Outlook	AA+ or AAA	Stable Outlook	Yes	
Alabama	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Alaska	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Connecticut	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Hawaii	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Illinois	GO	AA	Negative Outlook	AA+	Negative Outlook	No	
Maine	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Massachusetts	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Mississippi	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Montana	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
New Hampshire	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Oklahoma	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Oregon	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Pennsylvania	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Rhode Island	GO	AA	Rating Watch Negative	AA+	Rating Watch Negative	No	
Washington	GO	AA	Positive Outlook	AA+	TBD	Yes	See Note 1.
New York	GO	AA–	Positive Outlook	AA	Positive Outlook	No	
New Jersey	GO	AA–	Stable Outlook	AA	Stable Outlook	No	
West Virginia	GO	AA–	Stable Outlook	AA	Stable Outlook	No	
Wisconsin	GO	AA–	Stable Outlook	AA	Stable Outlook	No	
Michigan	GO	AA–	Negative Outlook	AA	Negative Outlook	No	
California	GO	A+	Rating Watch Negative	AA–	TBD	No	
District of Columbia	GO	A+	Stable Outlook	AA–	Stable Outlook	No	
Louisiana	GO	A+	Stable Outlook	AA–	Stable Outlook	No	
U.S. Virgin Islands	GO	BBB–	Stable Outlook	TBD	TBD	Yes	
Puerto Rico Aqueduct and Sewer Authority, PR	Water and Sewer Revenue	BBB–	Stable	TBD	TBD	Yes	

^aMay change based on actions taken between now and the time the changes are implemented. TBD — To be determined. Note 1: Bonds currently rated 'AA' with a Positive Rating Outlook will be revised to 'AA+' with either a Stable or a Positive Rating Outlook, after review. Note 2: Outlooks will be revised to Stable for bonds recalibrated to 'AA–' from 'A' with Positive Rating Outlook and from 'A+' with a Negative Rating Outlook, so their relative ranking is not reversed.

List of Selected Ratings and Expected Revisions (continued)

Issuer	Security Type	Current Rating	Rating Outlook/ Watch	Expected Rating ^a	Expected Rating Outlook or Watch ^a	Needs Review	Comments
Local Issuers							
Baltimore County, MD	COPs	AA+	Stable Outlook	AA+	Stable Outlook	No	GO rated 'AAA'; COPS capped at 'AA+'.
Danbury, CT	GO	AA+	Stable Outlook	AA+ or AAA	Stable Outlook	Yes	
Boston, MA	GO	AA	Stable Outlook	AA+	Stable Outlook	No	
Sarasota County, FL	Sales Tax	AA	Stable Outlook	AA or AA+	Stable Outlook	Yes	
Pasadena, CA	COPs	AA	Stable Outlook	AA or AA+	Stable Outlook	Yes	GO rated 'AA+' will not systematically be revised.
Honolulu (HI)	Water and Sewer Revenue	AA-	Negative Outlook	AA	Negative Outlook	No	GO rated 'AA+' will not systematically be revised.
Hillsborough County, FL	Fuel Tax	AA-	Stable Outlook	AA- or AA	Stable Outlook	Yes	Subordinate lien bonds, currently rated 'A+' with a Negative Outlook, would be revised to 'AA-' and retain the Negative Outlook, to be consistent with the senior lien bonds.
New York City	GO	AA-	Stable Outlook	AA	Stable Outlook	No	GO rated 'AA+' will not systematically be revised.
Cape Coral, FL	GO	A+	Negative Outlook	AA-	Stable Outlook	No	
Rio Rancho (NM)	Water and Sewer Revenue	A+	Stable Outlook	AA-	Stable Outlook	No	'A+' ratings lose Negative Outlook since former 'A+' ratings are now combined with former 'A' ratings; see Note 2 below.
Memphis, TN	GO	A+	Positive Outlook	AA-	Positive Outlook	No	
Edinburg Consolidated Independent School District, TX	GO	A	Positive Outlook	AA-	Stable Outlook	No	
West Contra Costa School District, CA	GO	A-	Negative Outlook	A+	Negative Outlook	No	
Greater New Haven Water Pollution Control Authority (CT)	Water and Sewer Revenue	A-	Stable Outlook	A+	Stable Outlook	No	'A' ratings lose Positive Outlook since former 'A' ratings are now combined with former 'A+' ratings at 'AA-'; see Note 2 below.
Detroit, MI	GO	BBB	Negative Outlook	TBD	TBD	Yes	
Syracuse, NY	GO	BBB	Stable Outlook	A-	Stable Outlook	No	
Philadelphia School District, PA	GO	BBB-	Negative Outlook	TBD	TBD	Yes	

^aMay change based on actions taken between now and the time the changes are implemented. TBD – To be determined. Note 1: Bonds currently rated 'AA' with a Positive Rating Outlook will be revised to 'AA+' with either a Stable or a Positive Rating Outlook, after review. Note 2: Outlooks will be revised to Stable for bonds recalibrated to 'AA-' from 'A' with Positive Rating Outlook and from 'A+' with a Negative Rating Outlook, so their relative ranking is not reversed.

Appendix II — Recent Examples of Extreme Fiscal Distress

While Fitch does not rate the obligations of either the city of Vallejo, CA or Jefferson County, AL, they provide recent examples of the type of severe credit deterioration that Fitch believes argue for a measured approach to adjusting municipal ratings.

Vallejo, CA

On May 23, 2008, the city of Vallejo, CA, filed a petition for protection under Chapter 9 of the U.S. Bankruptcy code. A material event notice issued at the time expressed uncertainty as to the city's ability to continue to make debt service payments on general fund debt. The agenda submitted to the mayor and city council by the city manager, assistant city manager, and finance director for the city council meeting at which the council voted to file the bankruptcy petition indicates that the city has had difficulty meeting its contractual commitments with available revenues and identifies a sizable and widening budget gap. Officials anticipate completely depleting available reserves and are seeking labor concessions necessary for the continued operation of the government. In addition, the city is reportedly negotiating with investors to cap interest rates on outstanding variable-rate debt at levels below those specified under the terms of the initial offering.

Jefferson County, AL

Jefferson County has extensively used variable-rate products and interest rate swaps to lower its cost of borrowing, particularly for its large sewer utility debt program. As is typical for variable-rate securities, principal and interest payments are supported by bank-provided liquidity facilities, and many of those obligations are also supported by bond insurance policies. Downgrades to some of the insurers triggered failed auctions in February, and variable-rate securities were voluntarily tendered to the liquidity providers, resulting in a steep increase in interest rates and an accelerated principal repayment reschedule. At the same time, floating-rate payments received by the county that were intended under interest rate swap agreements to offset payments due by the county to bondholders decreased as a result of drops in short-term interest rates. The sharp increase in required interest payments has reportedly put severe strain on the county's already tightly-balanced financial operations. The county has received from its liquidity providers and swap counterparties temporary forbearance (scheduled to expire July 31) from exercising those providers' rights that would be triggered by termination events that have already occurred, which would result in massive termination payments.

Near Misses

In addition to the above, there have been several other examples of issuers that experienced extreme fiscal distress. These include New York City (1975), Cleveland (1978), Philadelphia, PA (1990–1991), Bridgeport, CT (1991), Orange County, CA (1994), District of Columbia (1995), Miami, FL (1996), Yonkers, NY (1997), and Cranston, RI (2002). In most cases, the issuer required state intervention, including establishment of financial control boards and/or debt refinancing vehicles.

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